## SUBSTITUTE SEQUENCE LISTING

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aaa c Lys L 65	tg .eu :	ctg Leu	ata Ile	tat Tyr	999 Gly 70	gca Ala	tcc Ser	aac Asn	cgg Arg	tac Tyr 75	act Thr	gly aaa	gtc Val	ccc Pro	gat Asp 80	240
cgc t Arg P	tc he	acg Thr	ggc Gly	agt Ser 85	gga Gly	tct Ser	gca Ala	aca Thr	gat Asp 90	ttc Phe	act Thr	ctg Leu	acc Thr	atc Ile 95	agc Ser	288
agt g Ser V	rtg ( al (	cag Gln	gct Ala 100	gaa Glu	gac Asp	ctt Leu	gca Ala	gat Asp 105	tat Tyr	cac His	tgt Cys	gga Gly	cag Gln 110	agt Ser	tac Tyr	336

20

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25

Pro Gly Ala	cca gtg Pro Val												144
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gag tgg att Glu Trp Ile 65			_			_			-				240
caa gat ttc Gln Asp Phe		Lys	_		_		-					_	288
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ggg act ctg Gly Thr Leu 130	-	_		_									408
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                                                                   96
Gly Ser Thr Gly Asp Ile Gln Met Thr Gln Ser Pro Ser Thr Leu Ser
             20
                                 25
gct agc gtc ggg gat agg gtc acc ata acc tgc aag gcc agt gaa aat
Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Lys Ala Ser Glu Asn
                             40
gtg gat act tat gta tcc tgg tat cag cag aag cca ggc aaa gct ccc
Val Asp Thr Tyr Val Ser Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro
                         55
aag ctt cta att tat ggg gca tcc aac cgg tac act ggg gta cct tca
Lys Leu Leu Ile Tyr Gly Ala Ser Asn Arg Tyr Thr Gly Val Pro Ser
cgc ttc agt ggc agt gga tct ggg acc gat ttc acc ctc aca atc agc
                                                                   288
Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser
tct ctg cag cca gat gat ttc gcc act tat tac tgc gga cag agt tac
Ser Leu Gln Pro Asp Asp Phe Ala Thr Tyr Tyr Cys Gly Gln Ser Tyr
                                105
aac tat cca ttc acg ttc ggt cag ggg acc aag gtg gag gtc aaa cgt
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<223> Description of Artificial Sequence:human-mouse
      transgenic construct HuZAF VL
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288 caa gat ttc aag gac aag gct aca ctt aca gtc gac aaa tcc acc aat Gln Asp Phe Lys Asp Lys Ala Thr Leu Thr Val Asp Lys Ser Thr Asn aca qcc tac atq qaa ctq aqc aqc ctq aga tca gag gac act gca gtc 336 Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val 105 tat tac tgt gca aga gga ttt ctg ccc tgg ttt gct gac tgg ggc caa 384 Tyr Tyr Cys Ala Arg Gly Phe Leu Pro Trp Phe Ala Asp Trp Gly Gln 120 409 gga acc ctg gtc aca gtc tcc tca g Gly Thr Leu Val Thr Val Ser Ser 130 135 <210> 8 <211> 136 <212> PRT <213> Artificial Sequence <223> Description of Artificial Sequence:human-mouse transgenic construct HuZAF VH Met Gly Trp Ser Trp Ile Phe Leu Phe Leu Leu Ser Gly Thr Ala Gly Val His Ser Gln Val Gln Leu Val Gln Ser Gly Ala Glu Leu Lys Lys 25 Pro Gly Ser Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ile Phe Thr Ser Ser Trp Ile Asn Trp Val Lys Gln Ala Pro Gly Gln Gly Leu Glu Trp Ile Gly Arg Ile Asp Pro Ser Asp Gly Glu Val His Tyr Asn 65 Gln Asp Phe Lys Asp Lys Ala Thr Leu Thr Val Asp Lys Ser Thr Asn Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val 100 Tyr Tyr Cys Ala Arg Gly Phe Leu Pro Trp Phe Ala Asp Trp Gly Gln 120 Gly Thr Leu Val Thr Val Ser Ser 130 135

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<223> Description of Artificial Sequence:humanized
 immunoglobulin huXAF

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Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ile Phe Thr Ser Ser 20 25 30

Trp Ile Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Ile  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Gly Arg Ile Asp Pro Ser Asp Gly Glu Val His Tyr Asn Gln Asp Phe 50 55 60

Lys Asp Lys Ala Thr Leu Thr Val Asp Lys Ser Thr Asn Thr Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Gly Phe Leu Pro Trp Phe Ala Asp Trp Gly Gln Gly Thr Leu
100 105 110

Val Thr

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<220>

<223> Description of Artificial Sequence:humanized
 immunoglobulin huZAF

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Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ile Phe Thr Ser Ser 20 25 30

Trp Ile Asn Trp Val Lys Gln Ala Pro Gly Gln Gly Leu Glu Trp Ile 35 40 45

Gly Arg Ile Asp Pro Ser Asp Gly Glu Val His Tyr Asn Gln Asp Phe 50 55 60

Lys Asp Lys Ala Thr Leu Thr Val Asp Lys Ser Thr Asn Thr Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys \$85\$ 90 95

Ala Arg Gly Phe Leu Pro Trp Phe Ala Asp Trp Gly Gln Gly Thr Leu
100 105 110

Val Thr

<210> 11

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<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence:humanized
 immunoglobulin haf25

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Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ile Phe Thr Ser Ser 20 25 30

Trp Ile Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Ile 35 40 45

Gly Arg Ile Asp Pro Ser Asp Gly Glu Val His Tyr Asn Gln Asp Phe 50 55 60

Lys Asp Lys Ala Thr Leu Thr Val Asp Lys Ser Thr Asn Thr Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Gly Phe Leu Pro Trp Phe Ala Asp Trp Gly Gln Gly Thr Leu 100 105 110

Val Thr

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<211> 107

<212> PRT

<213> Homo sapiens

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<223> Variable region of the human Eu antibody light chain.

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1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Asn Thr Trp
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Met 35 40 45

Tyr Lys Ala Ser Ser Leu Glu Ser Gly Val Pro Ser Arg Phe Ile Gly 50 55 60

Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Asp Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Tyr Asn Ser Asp Ser Lys 85 90 95

Met Phe Gly Gln Gly Thr Lys Val Glu Val Lys
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<210> 13

<211> 117

<212> PRT

<213> Homo sapiens

<220>

<223> Variable region of the human Eu antibody heavy chain.

<400> 13

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Arg Ser 20 25 30

Ala Ile Ile Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Gly Ile Val Pro Met Phe Gly Pro Pro Asn Tyr Ala Gln Lys Phe 50 55 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Asn Thr Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Phe Tyr Phe Cys 85 90 95

Ala Gly Gly Tyr Gly Ile Tyr Ser Pro Glu Glu Tyr Asn Gly Gly Leu 100 105 110

Val Thr Val Ser Ser 115

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